

Remarks:

Reconsideration of the application is respectfully requested.

Claims 1 - 4, 6 - 17 and 19 - 29 are presently pending in the application. Claims 1 - 4, 6 - 17, 19 - 23 and 29 are subject to examination and claims 24 - 28 have been withdrawn from examination. Claims 7, 8, 16 and 29 have been amended. As it is believed that the claims were patentable over the cited art in their original form, the claims have not been amended to overcome the references.

In item 2 of the above-identified Office Action, claims 11 and 12 were rejected as allegedly being "single means" claims. Claims 13 and 15 were rejected as being dependent from claims 11 and/or 12.

Applicant respectfully traverses the above rejections of claims 11 - 13 and 15.

More particularly, MPEP § 2164.08(a) states:

A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. *In re Hyatt*, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.). When claims depend on a

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recited property, a fact situation comparable to Hyatt is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor. [emphasis added by Applicant]

As such, MPEP § 2164.08(a) **only applies to a means recitation that does not appear in combination with another recited element or means.** Applicant's independent claim 11 (from which claims 12, 13 and 15 depend) **does not include a means recitation, and thus, MPEP § 2164.08(a) does not apply.** More particularly, Applicant's independent claim 11 recites an apparatus for testing an integrated circuit using a self-test device that is located in the integrated circuit, which comprises:

a self-test control device for causing testing of the integrated circuit by the self-test device before the integrated circuit is connected to an external testing device that performs a function selected from the group consisting of reading out results of the test and evaluating the results of the test. [emphasis added by Applicant]

First, Applicant's claim 11 **does not in any way use the word "means"**. Courts have held that failure to use the word "means" in a claim generally is not found to be a "means" recitation under 35 U.S.C. § 112, paragraph six. For example, in Greenberg v. Ethicon Endo-Surgery, Inc., 39 USPQ2d 1783 (CAFC 1996), the Court of Appeals for the Federal Circuit held:

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We do not mean to suggest that section 112(6) is triggered only if the claim uses the word "means." The Patent and Trademark Office has rejected the argument that only the term "means" will invoke section 112(6), see 1162 O.G. 59 n.2 (May 17, 1994), and we agree, see Raytheon Co. v. Roper Corp., 724 F.2d 951, 957, 220 USPQ 592, 597 (Fed. Cir. 1983), cert. denied, 469 U.S. 835 (1984) (construing functional language introduced by "so that" to be equivalent to "means for" claim language). **Nonetheless, the use of the term "means" has come to be so closely associated with "means-plus-function" claiming that it is fair to say that the use of the term "means" (particularly as used in the phrase "means for") generally invokes section 112(6) and that the use of a different formulation generally does not.** [emphasis added by Applicant]

Greenberg, at 1786 - 1787. As such, the Court of Appeals for the Federal Circuit has held that use of the word "means", generally constitutes a "means" recitation under 35 U.S.C. § 112, and a different formulation (i.e., not using the word "means") **generally does not**. Applicant's claim 11 **does not use the word "means"**, as such, it will generally not be found to be a "means" recitation.

Further, the Court in Greenberg held:

First, the fact that a particular mechanism -- here "detent mechanism" -- is defined in functional terms is not sufficient to convert a claim element containing that term into a "means for performing a specified function" within the meaning of section 112(6). Many devices take their names from the functions they perform. The examples are innumerable, such as "filter," "brake," "clamp," "screwdriver," or "lock." Indeed, several of the devices at issue in this case have names that describe their functions, such as "graspers," "cutters," and "suture applicators."

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"Detent" (or its equivalent, "detent mechanism") is just such a term. Dictionary definitions make clear that the noun "detent" denotes a type of device with a generally understood meaning in the mechanical arts, even though the definitions are expressed in functional terms. See Random House Unabridged Dictionary 541 (2d ed. 1993) ("a mechanism that temporarily keeps one part in a certain position relative to that of another, and can be released by applying force to one of the parts"); Webster's Third New International Dictionary 616 (1968) ("a part of a mechanism (as a catch, pawl, dog, or click) that locks or unlocks a movement"); G.H.F. Naylor, Dictionary of Mechanical Engineering (4th ed. 1996) ("A catch or checking device, the removal of which allows machinery to work such as the detent which regulates the striking of a clock."). It is true that the term **"detent" does not call to mind a single well-defined structure, but the same could be said of other commonplace structural terms such as "clamp" or "container."** What is important is not simply that a "detent" or "detent mechanism" is defined in terms of what it does, **but that the term, as the name for structure, has a reasonably well understood meaning in the art.** [emphasis added by Applicant]

Greenberg, at 1786.

As such, the Court in Greenberg held that, if the name for the structure has a reasonably well understood meaning in the art, it is not a "means" recitation. Applicant's recited **self-test control device**, while not calling to mind a **single** structure, **has a reasonably well understood meaning in the art** and, thus, is not a "means" recitation.

In view of the foregoing, it is believed that, under the claim interpretation promulgated by the Court of Appeals for the

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Federal Circuit, the **self-test control device** of Applicant's claim 11 is **not** a means recitation and, thus, claim 11 is **not** a **single means claim** (i.e., MPEP § 2164.08(a) does not apply). As such, Applicant's claim 11 is believed to be in proper form, and claims 11 - 13 and 15 are believed to be in condition for allowance.

In item 3 of the Office Action, claims 1 - 4, 6 - 10, 14, 16 - 17, 19 - 23 and 29 were rejected as allegedly being indefinite under 35 U.S.C. § 112, second paragraph.

More particularly, it was alleged in the Office Action that it was not clear as to what was meant by the limitation of claim 1, stating:

taking at least parts of the integrated circuit out of operation after the parts have been tested by the self-test device;

Applicant respectfully disagrees. The above limitation of Applicant's claim 1 is described in the specification of the instant application such that a person of skill in the art would understand it. For example, page 25 of the instant application, line 25 - page 26, line 13, states:

The signal CLKOFF becomes 1 **when** the integrated circuit is in the test operating mode (ITESTMODE=1) and **the test carried out by the BIST module has been completed** (READY=1). **The signal CLKOFF is used for the purpose of preventing the clock signal CLK from being**

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supplied to the register block REGB and to the remaining components of the integrated circuit. As a result, after the completion of the test carried out by the BIST module, the integrated circuit can automatically be put into a state in which it exhibits a minimal power consumption.

It is even better if, additionally or alternatively, CLKOFF=1 is used to automatically switch off supply of the supply voltage Vdd that supplies the integrated circuit with power, with the exception of the supply VddR to the registered block REGB. [emphasis added by Applicant]

As can be seen from the specification of the instant application, after testing, parts of the integrated circuit are taken out of operation (i.e., the clock signal CLK and/or Voltage VDD being prevented from supplying those parts). As such, Applicant believes that the "taking ... device" language of claim 1 is clear on its face, and in view of the specification, and that claim 1 and its dependent claims are in condition for immediate allowance.

Additionally, it was alleged in item 3 of the Office Action that it was not clear how the control device is "moving", together with the integrated circuit, in the limitation of claim 4, stating:

moving the control device together with the integrated circuit.

The above rejection was similarly applied to Applicant's claim 14, which recites, among other limitations:

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wherein said self-test control device is constructed to be moved together with the integrated circuit

Applicant respectfully disagrees with the rejections of claims 4 and 14. More particularly, the above limitations of Applicant's claims 4 and 14 are described in the specification of the instant application such that a person of skill in the art would understand it. For example, page 40 of the instant application, lines 1 - 12, states:

In particular, each wafer carrier contains a contact-making device WK, the contact-making devices of all the wafer carriers are connected to a common control device CM that provides and generates the necessary voltages and signals. The control device CM is either transported together with the test box, or is connected to the contact-making devices WK via lines which are so long that the test box TB and the control device CM can be moved relative to each other. The simultaneous testing of the integrated circuits produced on a plurality of wafers makes it possible to reduce to a minimum the number of control devices CM to be provided for this purpose. [emphasis added by Applicant]

The specification of the instant application makes it clear that the control device can be transported with the test box containing the wafers (i.e., moving, together, the control device and the integrated circuits). As such, the language of Applicant's claims 4 and 14 is believed to be clear on its face, and in view of the specification. Thus, Applicant's claims 4 and 14 are believed to be in condition for immediate allowance.

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It was further alleged in item 3 of the Office Action that claims 7 and 8 included a negative limitation. Applicant has amended claims 7 and 8, herein, to address the rejection of these claims. Support for these changes can be found on page 26 of the specification of the instant application. As such, Applicant's claims 7 and 8 are believed to additionally be in condition for immediate allowance.

It was additionally alleged in item 3 of the Office Action that claims 16 and 29 were indefinite for allegedly not disclosing the interrelationship of certain components. Applicant has amended claims 16 and 29 to address this rejection. Support for these changes can be found on pages 19 - 20 and 26 - 27 of the specification of the instant application. As such, it is believed that Applicant's claims 16 and 29, and all claims depending therefrom, are in condition for immediate allowance.

It is accordingly believed that the specification and the claims meet the requirements of 35 U.S.C. § 112, second paragraph.

Applicant notes that claims 1 - 4, 6 - 17, 19 - 23 and 29 were not rejected over any prior art. MPEP § 707.07 states that an

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Examiner's action will be complete as to all matters and that matters of form need not be raised by the examiner until a claim is found allowable. Claims 1 - 4, 6 - 17, 19 - 23 and 29 of the instant application were rejected only under 35 U.S.C. § 112, second paragraph. As such, it is believed that claims 1 - 4, 6 - 17, 19 - 23 and 29 are patentable over the art of record and, now that the 35 U.S.C. § 112 rejections have all been addressed herein, should be allowable. Applicant respectfully requests the allowance of claims 1 - 4, 6 - 17, 19 - 23 and 29.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1, 11, 16 and 29. Claims 1, 11, 16 and 29 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1, 11 or 16.

In view of the foregoing, reconsideration and allowance of claims 1 - 4, 6 - 17 and 19 - 29 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a

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telephone call so that, if possible, patentable language can
be worked out.

If an extension of time for this paper is required, petition
for extension is herewith made.

Please charge any fees that might be due with respect to
Sections 1.16 and 1.17 to the Deposit Account of Lerner
Greenberg Sterner LLP, No. 12-1099.

Respectfully submitted,



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